

STATE OF CALIFORNIA
STATE WATER RESOURCES CONTROL BOARD

ORDER WQO 2003 - 0020

In the Matter of the Petition of

LARRY AND PAMELA CANCHOLA

For Review of Water Code Section 13267

Request Regarding

MTBE Investigation of Charnock Sub-Basin

by the

California Regional Water Quality Control Board,
Los Angeles Region

SWRCB/OCC FILE A-1554

BY THE BOARD:

Larry and Pamela Canchola (petitioners) are the former owners of a site, located at 11614 Venice Boulevard in Los Angeles, California. In the past, the site was operated as a gasoline station. In a letter issued on January 10, 2003 (January 10 letter), the Los Angeles Regional Water Quality Control Board (Regional Board) directed the Cancholas, pursuant to Water Code section 13267, to perform additional assessment and response activities at the former underground storage tank (UST) site. The activities are part of an on-going methyl tertiary butyl ether (MTBE) investigation of the Charnock Sub-Basin. The Cancholas petitioned the State Water Resources Control Board (State Board or Board) to review the directives in the January 10 letter. They request that the State Board determine that the Cancholas are not responsible for MTBE releases at or near the site. This order grants petitioners' request and remands the matter back to the Regional Board.

I. BACKGROUND

In 1996 Santa Monica's Charnock wellfield and Southern California Water Company's wellfield were shut down due to the detection of MTBE. In 1997 the Regional Board and the United States Environmental Protection Agency (EPA) entered into a Memorandum of

Understanding (MOU) to jointly investigate the MTBE pollution.¹ Under the MOU, the Regional Board is the lead agency for individual source investigations and response actions for potential sources in the Charnock Sub-Basin. EPA is the lead for the overall Charnock Sub-Basin assessment and response. To carry out the investigation, EPA and the Regional Board have been issuing joint directive letters to the Charnock potential responsible parties (PRPs) under their respective authorities. Currently, there are 27 sites subject to Regional Board and EPA directives to conduct site investigations, monitoring, or cleanup, or some combination of these activities.

The Canchola site, known as PRP Site No. 3, is one of the 27. It is located in the Santa Monica Basin, about three miles from the Pacific Ocean. Residential and commercial properties surround the site. A subsurface flood control channel borders the southwest side of the property. A buried sewer line runs underneath an alley bordering the southeast side. An automotive service garage lies immediately adjacent to the site on the northeast side. The primary water production aquifer in the area is the Silverado aquifer in the San Pedro Formation. The Charnock wells extract groundwater from the Silverado aquifer. The Charnock well fields, from which much of Santa Monica's municipal water supply is drawn, are located less than 2,000 feet north of the site.

Atlantic Richfield Company (ARCO) operated the site as a service station from late 1958 or early 1959 to 1977. The Cancholas purchased the site in 1977 and operated it as an ARCO service station until February 1986. In February 1986 they sold the property to Z & S West, and the UST system was removed. The property was later developed as a strip mall, known as the Venice McLaughlin Center.

The Regional Board and EPA issued joint directive letters to the Cancholas, ARCO, and Z & S West as PRPs for MTBE pollution at the Canchola site. In May 2002 ARCO filed a petition with this Board in which ARCO sought to be removed from the PRP list for the Charnock Sub-Basin-wide MTBE investigation.² The Regional Board eventually agreed that ARCO was not responsible for the MTBE detected at the site. The Regional Board based this determination, contained in a December 10, 2002, letter to ARCO, the Cancholas, and

¹ Regional Board Response to petition, dated March 12, 2003, Att. B.

Z & S West, “on the information that ARCO ceased to operate the Site in 1977 and the use of MTBE in gasoline did not start until 1979” The letter also stated that the three PRPs remain responsible for assessment and corrective actions related to non-MTBE gasoline constituents that were detected in soil and groundwater at the site. After receiving the letter, ARCO dismissed its petition without prejudice.

Like ARCO, the Cancholas assert that they are not responsible for MTBE pollution at the site. They ask to be removed from the Regional Board’s PRP list for the Charnock Sub-Basin MTBE investigation and to be excluded from all work required by the January 10 letter that is related to MTBE. The Regional Board counters that the Cancholas are responsible because MTBE is present in soil and groundwater, and the MTBE in the soil is related to a gasoline source area, a former dispenser, at the site. The Regional Board also contends that, regardless of whether or not the Cancholas are responsible for MTBE releases at the site, the petitioners should continue to participate in the investigation and cleanup of gasoline-impacted soil and groundwater beneath the site and off-site. These contentions are analyzed below.

II. CONTENTIONS AND FINDINGS

At the outset, it is important to clarify the issues in dispute. Several petroleum constituents have been detected in soil and groundwater at the former UST site. The Cancholas do not appear to contest the Regional Board’s authority to require investigative reports under Water Code section 13267 to address these pollutants, except for MTBE. Section 13267 broadly authorizes the Regional Water Quality Control Boards (regional boards) to require persons who discharge, have discharged, or are “suspected of having discharged or discharging” waste that could affect water quality to furnish technical or monitoring program reports. This broad authority is tempered by the requirement that the regional boards identify the evidence supporting the request; however, the evidence can be any relevant evidence on which responsible persons are accustomed to rely in the conduct of serious affairs.³

² State Board File A-1476.

³ Wat. Code § 13267(b)(1) and (e).

Rather, the sole issue raised in the Canchola petition appears to be whether the Cancholas are appropriately considered PRPs for MTBE pollution at the former UST site. If so, they must continue to investigate and remediate MTBE pollution at the site. To date, the Cancholas have not been required to participate in the regional MTBE investigation and cleanup led jointly by the Regional Board and EPA. The two agencies prepared the “Charnock MTBE Participation Flowchart”, which provides guidance to the Board in answering this question. Under the flowchart, a party is not a PRP if “evidence [has] been accepted by the agencies that demonstrates no MTBE has been stored at the site[.]”⁴ In that case, the party is “[n]ot a priority PRP for the purposes of the Charnock Sub-basin assessment.”⁵

The Board concludes that the Cancholas should not be considered priority PRPs for MTBE pollution at the site for two reasons. First, the Cancholas have provided uncontroverted evidence that the Cancholas did not use or store gasoline containing MTBE at the site. Second, there is insufficient data in the record from which to determine that the low levels of MTBE detected in soil and groundwater at the site are attributable to the former UST system. The data is inadequate to overcome the countervailing evidence submitted by the Cancholas that gasoline with MTBE was not stored at the site. Having reached this conclusion, the Board also concludes that the Regional Board must treat the Cancholas the same as other similarly-situated parties with respect to their PRP status for the MTBE Charnock Sub-Basin investigation.

A. Cancholas’ Use or Storage of MTBE

The Cancholas have submitted uncontroverted evidence that MTBE was not stored at the site during their ownership of the site. The Cancholas used and sold petroleum purchased only from ARCO Petroleum Products Company. Their service station received petroleum from two nearby ARCO terminals, the Carson and Vinvale terminals. Through 1986, these terminals were serviced by dedicated pipelines that ran directly from ARCO’s Los Angeles Refinery to the terminals. ARCO did not use MTBE as a gas additive until sometime after February 1986, when the Cancholas ceased ownership of the site. At least through May 1986, ARCO’s stated policy was to not permit the addition of oxygenates, including MTBE, to gasoline

⁴ Regional Board Response to Petition, dated March 12, 2003, Att. C.

⁵ *Ibid.*

or to accept gasoline with oxygenates from outside sources. ARCO apparently did not use MTBE as a gas additive until sometime in 1989.

The Regional Board contends that the Cancholas operated the ARCO service station well after EPA approved the use of MTBE as a fuel oxygenate in 1979. Although this is true, there is no evidence that MTBE was actually used in the Los Angeles area beginning in 1979. Rather, evidence in the record suggests that the additive was not, in fact, used in the Los Angeles area until well after 1979.

B. MTBE Data in Record

The Regional Board, nevertheless, contends that the Cancholas are properly designated PRPs for the MTBE investigation because MTBE has been detected in the soil and groundwater at the site. The Regional Board further asserts that MTBE in the soil is from the historic operation of the UST site.

A preliminary site assessment conducted in 1997 at the former gas station site found total petroleum hydrocarbons as gasoline (TPHg) and benzene, toluene, ethylbenzene, and xylene (BTEX) gasoline constituents in soil and groundwater beneath the former UST system. Between 1999 and 2002, 16 soil borings were drilled. Eleven were converted to groundwater monitoring wells. Groundwater was encountered at about 70 feet below ground surface (bgs) in the shallow water-bearing zone. Groundwater in this zone flows toward the east at a very slight hydraulic gradient.

Subsurface investigation at the site has included the locations of the former north and south gasoline dispenser islands as well as adjacent areas. Although multiple releases may have occurred at different locations and at different times, the primary gasoline release location appears to be near the site of the former south dispenser island. The highest concentrations of TPHg and benzene, 26,000,000 micrograms per kilogram (ug/kg) and 570,000 ug/kg, respectively, were detected at about 40 feet bgs at this location. TPHg and BTEX were detected near the surface and were found at deeper depths as the lateral distance from the south dispenser island increases. This suggests that gasoline migrated down and then spread laterally due to dispersion or the effects of lithologic heterogeneities, or both.

TPHg and BTEX have consistently been detected at high levels in groundwater at wells in the vicinity of the former south dispenser and about 30 feet away. Other wells have had moderate or non-detect levels.

Although there is abundant evidence of other gasoline constituents in soil at the UST site, there is little evidence of MTBE. MTBE was detected in one soil sample from the unsaturated zone at the 40-foot depth at a concentration of 23,000 ug/kg. This sample is discussed below. The pollutant was also detected in three samples from another soil boring, B-13, collected at 45 to 55 feet bgs. The maximum detected concentration was 10 ug/kg. MTBE was also detected in seven saturated soil samples at concentrations less than 6 ug/kg, a level below the laboratory's quantification limit. MTBE has been detected in only two soil samples above the applicable quantification limits.

MTBE was detected in soil boring B-4 located near the former south dispenser island at a concentration of 23,000 ug/kg at 40 feet bgs. The Regional Board cites this as evidence that MTBE was released from the former south dispenser site. However, this analytical result appears to be invalid. EPA Method 8021B was used to analyze the sample, and TPHg was detected concurrently at 26,000,000 ug/kg. When TPHg concentrations are high, Method 8021B tends to result in false-positive MTBE quantifications because the method is generally unable to discriminate between MTBE and co-eluting compounds⁶. Hence, in the presence of high TPHg concentrations, one cannot rely solely on this method's results as evidence of MTBE. The results in this case were not confirmed with a second test. Nor could the results be corroborated by other soil samples from the same boring or adjacent borings. MTBE was not detected in any of these borings.

MTBE has been consistently detected above quantification limits in 4 of the 11 groundwater monitoring wells at the former UST site. Three wells are located along the southeast portion of the property. The fourth well is located on the automotive service garage property along the site's northeast perimeter. The highest MTBE concentration was detected in

⁶ A "co-eluting compound" is one that comes out on the gas chromatograph trace at the same time interval as another compound. Because the two chemicals "elute" at the same time, it is impossible to distinguish between them or to determine which chemical is present without some other type of data.

the latter well at 21 ug/L. The secondary maximum contaminant level established by the Department of Health Services for MTBE is 5 ug/L.⁷

C. MTBE Sources

There is insufficient evidence in the record on MTBE to pinpoint its source. There is no direct evidence tying MTBE in the soil and groundwater to a source point in the UST system. Although MTBE was not reliably detected at the south dispenser, it can be inferred that the low levels of MTBE detected in soil and groundwater at boring B-13, located about 30 feet east of the dispenser site, may be associated with petroleum releases originating from the south dispenser location. Because gasoline constituents detected in soil in boring B-13 likely have laterally migrated from the south dispenser, it is reasonable to surmise that the same transport process could apply to MTBE.

On the other hand, the Cancholas contend that non-UST facility sources, such as the adjacent auto repair shop, storm drains, or public parking lots are responsible for the MTBE detected on-site. The record also lacks evidence of specific non-UST facility sources. MTBE is generally known to be present in urban stormwater runoff. Whether stormwater in this case is an MTBE source cannot be determined. Evidence in the record does not identify a pathway for stormwater or other surface releases to infiltrate the site and commingle with the gasoline releases from the south dispenser location.

The record does contain evidence that wastewater has degraded the shallow aquifer below the site. The surfactant indicator, methylene blue active substance (MBAS), was detected in seven wells throughout the site. Common sources of surfactants include vehicle and equipment wash water, municipal wastewater, and septic systems. If the groundwater at the site is vulnerable to surfactant degradation, it is likely that other offsite contamination could impact groundwater at the site as well.

D. Cancholas' Status as PRPs for MTBE Investigation

In sum, the Cancholas have submitted uncontroverted evidence that they did not use or store gasoline containing MTBE during their ownership of the UST site. There are low

⁷ Cal. Code Regs., tit. 22, § 64449(a). The primary MCL is 13 ug/L. *Id.* § 64444(a).

levels of MTBE in soil and groundwater at some locations on-site. Evidence in the record regarding the source of the MTBE, however, is inconclusive.

Successfully cleaning up MTBE pollution that threatens the Charnock wellfields is an imperative. The State Board recognizes that broadening, rather than reducing, the PRP list for the cleanup effort furthers that goal. The Board has previously held that “it is appropriate and responsible for a Regional Board to name all parties for which there is reasonable evidence of responsibility, even in cases of disputed responsibility” in a cleanup order.⁸ There must be substantial evidence, however, to support a finding of responsibility.⁹

While the Board does not ordinarily second-guess the regional boards on these kinds of issues, the Board is unable to conclude in this case that there is substantial evidence in the existing record supporting a finding that the Cancholas are responsible for MTBE pollution at the former UST site. The evidence is insufficient to rebut the Cancholas’ uncontroverted evidence that they did not use or store MTBE during their ownership of the site. The Board, therefore, concludes that the Regional Board cannot, at the present time, require the Cancholas to further investigate or remediate MTBE pollution at the UST site. If, in the future, the Regional Board obtains new information that more clearly ties MTBE detected on-site to the former UST system, the Regional Board may reconsider the Cancholas’ status as a PRP for MTBE.

The Regional Board argues that the Cancholas should continue to participate in the investigation and cleanup of gasoline-impacted soil and groundwater on and off-site. This order addresses only MTBE detected at the site. The Regional Board may continue to take any appropriate action related to gasoline constituents, excluding MTBE, detected at the site.

III. CONCLUSIONS

For the reasons explained above, the State Board concludes that:

1. The evidence in the existing record is insufficient to hold the Cancholas responsible for MTBE detected in soil and groundwater at the site.
2. The Regional Board cannot, at the present time, require the Cancholas to further investigate or remediate MTBE pollution at the site.

⁸ State Board Order WQ 85-7 at 11.

⁹ *Ibid.*

ORDER

IT IS HEREBY ORDERED that the Cancholas' petition is granted with respect to their request that the Board determine that they are not responsible for MTBE releases at the site.

IT IS FURTHER ORDERED that the matter is remanded to the Regional Board for appropriate action consistent with this order.

CERTIFICATION

The undersigned, Clerk to the Board, does hereby certify that the foregoing is a full, true, and correct copy of an order duly and regularly adopted at a meeting of the State Water Resources Control Board held on November 19, 2003.

AYE: Arthur G. Baggett, Jr.
Peter S. Silva
Richard Katz
Gary M. Carlton
Nancy H. Sutley

NO: None.

ABSENT: None.

ABSTAIN: None.


Debbie Irvin
Clerk to the Board